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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,559	10/12/2001	Pradip Mitra	10919/25501	1434
29937	7590	12/13/2004	EXAMINER	
SIDLEY AUSTIN BROWN & WOOD LLP			LEE, SHUN K	
717 NORTH HARWOOD			ART UNIT	
SUITE 3400			PAPER NUMBER	
DALLAS, TX 75201			2878	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/976,559

Applicant(s)

MITRA, PRADIP

Examiner

Shun Lee

Art Unit

2878

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 15 November 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);

(b) ☐ They raise the issue of new matter (see NOTE below);

(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-54.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

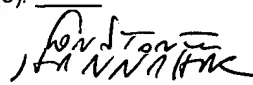
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____

13. ☐ Other: _____.


CONSTANTINE HANNAHER
PRIMARY EXAMINER
GROUP ART UNIT 2878

Continuation of 3. NOTE: the proposed amendment raises new issues that would require further consideration and/or search. For example, it is unclear if "the doped region" is referring to the patterned doping layer or other claim elements.

Continuation of 11. does NOT place the application in condition for allowance because: examiner respectfully disagrees with applicant's arguments that Cockrum et al. does not disclose forming a patterned doping layer above the passivation layer and driving dopant from the patterned doping layer into the radiation absorption layer to form a doped region since Cockrum et al. state (column 6, lines 15-62) "Referring to FIGS. 4a-4k there is illustrated another method of the invention which forms by a diffusion process p-n diode junctions which lie under the passivation layer 18. Steps 4a-4c are substantially the same as steps 3a-3c above. In step 4d portions of the passivation layer 18 are selectively removed through the openings within mask layer 26. This step of selectively removing may be accomplished by the aforementioned wet chemical etch such that the underlying p-type substrate is not converted to n-type. In step 4e a relatively thin source layer 30 of a suitable n-type dopant is deposited over the surfaces of the photoresist layer 26 and the surfaces exposed within the openings. For example, the source layer 30 may comprise indium and may have a thickness of approximately 100 angstroms. FIG. 4f shows the structure after the photoresist layer is removed, thereby rejecting the overlying source layer 30 except where it contacts the layer 12 and the exposed surfaces of the passivation layer 18. A heating process is thereafter performed which diffuses indium from the source layer 30 into the p-type layer 12, thereby converting the p-type material and forming the diffused n-type regions 14a and 14b. As can be seen in FIG. 4g, diffused the n-type regions 14a and 14b extend laterally outwards and the resultant p-n junctions underlie the passivation layer 18. FIG. 4h shows a second photomask layer 26a which is applied by a conventional method such that it overlies the passivation layer 18. The steps illustrated in FIGS. 4i through 4k are substantially the same as FIGS. 3e through 3g, described above, wherein contact metallization and ground metallization are provided with the second and third mask layers. As described above, the mask layer 26 is removed in step 4f before the step of diffusing is accomplished. This is preferable in that the heat applied during the diffusion process may cause a polymerization of the mask layer 26, making the subsequent removal of the layer 26 difficult to accomplish. It can be appreciated that, depending on the type of material which comprises the mask layer 26, the diffusion step may be accomplished before the removal of the mask layer 26". Thus Cockrum et al. teach (column 6, lines 15-62) forming a patterned doping layer (30 in Figs. 4E and 4F) above the passivation layer (18 in Figs. 4B-4K) and driving (i.e., thermally diffusing) dopant from the patterned doping layer (30 in Figs. 4E and 4F) into the radiation absorption layer (12 in Fig. Figs. 4A-44K) to form a doped region (14a or 14b in Figs. 4G-4K).